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10/677,377

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Makoto Sato

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EXAMINER

SMITH, JEFFREY S

ART UNIT

PAPER NUMBER

2624

MAIL DATE

DELIVERY MODE

09/24/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/677,377

Applicant(s)

SATO, MAKOTO

Examiner

Jeffrey S. Smith

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-15, 17, 20-22, 24, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27 and 28 is/are rejected.
- 7) ☒ Claim(s) 13-15, 17, 20-22 and 24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 09/2007.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

In response to this requirement, please provide answers to each of the following interrogatories eliciting factual information that is known by the applicant and the assignee of this application:

1. In application number 2002-309841 filed in Japan October 24, 2002, did the Japanese Patent Office make any rejections? Please respond by answering "yes" if the Japanese Patent Office did make any rejections or by answering "no" if the Japanese Patent Office did not make any rejections. If the Japanese Patent Office did make any rejections, please submit copies of each rejection made by the Japanese Patent Office.
2. In application number 2002-309841 filed in Japan October 24, 2002, did the Japanese Patent Office allow any claims? Please respond by answering "yes" if the Japanese Patent Office allowed any claims or by answering "no" if the Japanese Patent Office has not allowed any claims. If the Japanese Patent Office did allow any claims, please submit a copy of each allowed claim.
3. Please state the application number of every application that claims priority to application number 2002-309841 filed in Japan October 24, 2002. For example, if any patent application filed in Europe claims priority to application number 2002-309841 filed in Japan, please identify the application number of each such application filed in

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Europe. Also, if any applications have been filed in any other countries that claim priority to application number 2002-309841, then state the application number of each such application.

4. Has any application that claims priority to or the benefit of the filing date of application number 2002-309841 received an Office action, a search report, or an examination report? Please respond by answering "yes" if any such application has received an Office action, search report or examination report or by answering "no" if no such applications have received an Office action, search report or examination report. If the answer to this question is "yes," then please submit a copy of each Office action, each search report and each examination report.

5. Has any claim in an application that claims priority to or the benefit of the filing date of application number 2002-309841 been allowed by a Patent Office? Please respond by answering "yes" if any claim has been allowed or by answering "no" if no claim has been allowed. If the answer to this question is "yes," please submit a copy of each allowed claim.

6. In application number 2003-134022 filed in Japan May 13, 2003, did the Japanese Patent Office make any rejections? Please respond by answering "yes" if the Japanese Patent Office did make any rejections or by answering "no" if the Japanese Patent Office did not make any rejections. If the Japanese Patent Office did make any rejections, please submit copies of each rejection made by the Japanese Patent Office.

7. In application number 2003-134022 filed in Japan May 13, 2003, did the Japanese Patent Office allow any claims? Please respond by answering "yes" if the

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Japanese Patent Office allowed any claims or by answering "no" if the Japanese Patent Office has not allowed any claims. If the Japanese Patent Office did allow any claims, please submit a copy of each allowed claim.

8. Please state the application number of every application that claims priority to application number 2003-134022 filed in Japan May 13, 2003. For example, if any patent application filed in Europe claims priority to application number 2003-134022, please identify the application number of each such application filed in Europe. Also, if any applications have been filed in any other countries that claim priority to application number 2003-134022, then state the application number of each such application.

9. Has any application that claims priority to or the benefit of the filing date of application number 2003-134022 filed in Japan received an Office action, a search report, or an examination report? Please respond by answering "yes" if any such application has received an Office action, search report, or examination report or by answering "no" if no such applications have received an Office action, search report or examination report. If the answer to this question is "yes," then please submit a copy of each Office action, each search report and each examination report.

10. Has any claim in an application that claims priority to or the benefit of the filing date of application number 2003-134022 filed in Japan been allowed by a Patent Office? Please respond by answering "yes" if any claim has been allowed or by answering "no" if no claim has been allowed. If the answer to this question is "yes," please submit a copy of each allowed claim.

This information is relevant to patentability. Applicant is reminded that failure to fully reply to this requirement for information will result in a holding of abandonment. This requirement is an attachment of the enclosed Office action. A complete reply to the enclosed Office action must include a complete reply to this requirement. The time period for reply to this requirement coincides with the time period for reply to the enclosed Office action.

Claim Objections

Claims 13, 20, and 27-28 are objected to because of the following informalities: In claim 13, "computing a difference image" should be "computing the difference image" to reflect the antecedent basis of this element as recited in the preamble and the decision element. The other independent claims have the same objection. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 27 and 28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Both claims appear to be attempting to claim a computer readable storage medium storing a computer executable program. However, both claims recite a computer program per se and are therefore non-statutory.

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For claim 27, the phrase "A computer executable program...comprising" causes the claim to recite a computer program per se. The additional preamble elements have no patentable weight because they do not breath life and meaning into the body of the claim.

For claim 28, this claim has a similar problem with the phrase "said program comprising" because the other preamble elements are not given patentable weight. This claim is closer to being statutory because it initially recites "A computer readable storage medium storing a computer executable program." This claim would be statutory if amended to replace "said program comprising" with "said computer-readable storage medium comprising."

Allowable Subject Matter

Claims 13-15, 17, 20-22 and 24 would be allowable if amended to overcome the objections to the claims. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements identified in the claim objections or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

The following is a statement of reasons for the indication of allowable subject matter: Independent claims 13 and 20 recite "deciding which one of a shadow increase region or a shadow decrease region of the difference image of the first radiographic image and the second radiographic image is to be displayed as a high-concentration region or a low-concentration region." This element, as shown for example in figures

16A, 16B and 17 of the application as originally filed determines whether a region of a difference image that shows a relative increase in the size of a shadow is displayed as a low-concentration (black) region or as a high-concentration (white) region. Similarly, this element determines whether a region of the difference image that shows a decrease of the shadow's size is displayed as a high-concentration (white) region or a low-concentration (black) region.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey S. Smith whose telephone number is 571 270-1235. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on 571 272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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JSS

September 14, 2007



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